

SAFETY DATA SHEET

1. Identification

Product identifier

SULFURIC ACID 66 BE NSF

Other means of identification

None.

Recommended use

ALL PROPER AND LEGAL PURPOSES

Recommended restrictions

None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name

Brenntag Northeast, Inc.

Address

81 West Huller Lane Reading, PA 19605

Telephone

610-926-4151

E-mail

Not available.

Emergency phone number

800-424-9300

Chemtrec

2. Hazard(s) identification

Physical hazards

Not classified.

Health hazards

Skin corrosion/irritation

Category 1

Serious eye damage/eye irritation

Category 1

Environmental hazards

Not classified

OSHA defined hazards

Not classified

Label elements



Signal word

Danger

Hazard statement

Causes severe skin burns and eye damage. Causes serious eye damage.

Precautionary statement

Prevention

Do not breathe mist or vapor. Wash thoroughly after handling. Wear protective gloves/protective

clothing/eye protection/face protection.

Response

If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison

center/doctor. Wash contaminated clothing before reuse.

Storage

Store locked up

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information

None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
SULFURIC ACID		7664-93-9	93
Other components below r	eportable levels		7

^{*}Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

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4. First-aid measures

Inhalation

Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact

Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash

contaminated clothing before reuse

Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

Ingestion

Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If

vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important

symptoms/effects, acute and delayed

Indication of immediate medical attention and special treatment needed

Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing media

Specific hazards arising from

the chemical

Special protective equipment and precautions for firefighters

Fire fighting equipment/instructions

Specific methods

General fire hazards

Foam, Powder, Carbon dioxide (CO2).

Do not use water jet as an extinguisher, as this will spread the fire.

During fire, gases hazardous to health may be formed.

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Move containers from fire area if you can do so without risk.

Use standard firefighting procedures and consider the hazards of other involved materials.

No unusual fire or explosion hazards noted.

Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS

Methods and materials for containment and cleaning up This product is miscible in water. Should not be released into the environment.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling Conditions for safe storage. including any incompatibilities Respiratory protection is "only required" when sprays are present in the air.

Store locked up. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

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8. Exposure controls/personal protection

Occupational exposure limits

US.	OSHA	Table	Z-1	Limits	for A	ir Con	taminants	(29	CFR	1910	.1000)
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Material	Туре	Value	
SULPHURIC ACID	PEL	1 mg/m3	
Components	Type	Value	
SULFURIC ACID (CAS 7664-93-9)	PEL	1 mg/m3	
US. ACGIH Threshold Limit Values			
Material	Type	Value	Form
SULPHURIC ACID	TWA	0.2 mg/m3	Thoracic fraction.
Components	Type	Value	Form
SULFURIC ACID (CAS 7664-93-9)	TWA	0.2 mg/m3	Thoracic fraction.
US. NIOSH: Pocket Guide to Chemic	cal Hazards		
Material	Туре	Value	
SULPHURIC ACID	TWA	1 mg/m3	
Components	Type	Value	

SULFURIC ACID (CAS 7664-93-9) Biological limit values

No biological exposure limits noted for the ingredient(s).

TWA

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

1 mg/m3

Individual protection measures, such as personal protective equipment

The following are recommendations for Personnel Protective Equipment (PPE). The employer/user of this product must perform a Hazard Assessment of the workplace according to OSHA regulations 29 CFR 1910.132 to determine the appropriate PPE for use while performing any task involving potential exposure to this product.

Eye/face protection

Wear safety glasses with side shields (or goggles) and a face shield.

Skin protection

Hand protection

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove

supplier.

Other

Wear appropriate chemical resistant clothing.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state

Liquid.

Form Color

CLEAR PALE YELLOW

Odor

ODORLESS

Odor threshold

Not available

pH

0.3 - 2.1 1 N sol= 0.3, 0.1 N sol= 1.2, 0.01 N sol= 2.1

Melting point/freezing point

-31 °F (-35 °C)

Initial boiling point and boiling

530.06 °F (276.7 °C) estimated

range

554 °F (290 °C)

Flash point

Not available.

Evaporation rate

Not available.

Flammability (solid, gas)

Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower

Not available

Flammability limit - upper

Not available

(%)

Explosive limit - lower (%)

Not available.

Explosive limit - upper (%)

Not available

Vapor pressure

0.000008 kPa at 25 °C 0.000008 kPa at 25 °C

3.4 Vapor density

Relative density

Not available.

Solubility(ies)

Solubility (water)

Miscible

Partition coefficient

Not available.

(n-octanol/water) Auto-ignition temperature

Not available

Decomposition temperature

Not available.

Viscosity

Not available.

Other information

Density

15.31 lbs/gal

Dynamic viscosity

21 mPa.s

Dynamic viscosity temperature

77 °F (25 °C)

Explosive properties

Not explosive.

Molecular formula

H2-04-S 98.08 g/mol

Molecular weight

Not oxidizing

Oxidizing properties

7 % estimated

Percent volatile Specific gravity

1.84

10. Stability and reactivity

Reactivity

Reacts violently with strong alkaline substances. This product may react with reducing agents.

Chemical stability

Material is stable under normal conditions. Hazardous polymerization does not occur.

reactions

Contact with incompatible materials. Do not mix with other chemicals.

Conditions to avoid Incompatible materials

Possibility of hazardous

Bases. Reducing agents

Hazardous decomposition

No hazardous decomposition products are known.

products

11. Toxicological information

Information on likely routes of exposure

Inhalation

May cause irritation to the respiratory system. Prolonged inhalation may be harmful.

Skin contact Eve contact

characteristics

Causes severe skin burns. Causes serious eye damage

Ingestion

Causes digestive tract burns.

Symptoms related to the physical, chemical and

toxicological

Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including

blindness could result.

Information on toxicological effects

Acute toxicity

Not available

Skin corrosion/irritation

Causes severe skin burns and eye damage.

Serious eye damage/eye

Causes serious eye damage

irritation

Respiratory or skin sensitization

Respiratory sensitization

Not a respiratory sensitizer.

Skin sensitization

This product is not expected to cause skin sensitization.

Germ cell mutagenicity

No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity

This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed

Reproductive toxicity

This product is not expected to cause reproductive or developmental effects.

Specific target organ

toxicity - single exposure

Not classified.

Specific target organ

Not classified.

toxicity - repeated

exposure

Not an aspiration hazard

Aspiration hazard Chronic effects

Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity

Because of the low pH of this product, it would be expected to produce significant ecotoxicity upon

exposure to aquatic organisms and aquatic systems

Components		Species	Test Results
SULFURIC ACID (CA	AS 7664-93-9)		
Aquatic			
Crustacea	EC50	Daphnia magna	> 100 mg/l, 48 hours
	LC50	Aesop shrimp (Pandalus montagui)	42.5 mg/l, 48 hours
		Cockle (Cerastoderma edule)	200 - 500 mg/l, 48 hours
		Common shrimp, sand shrimp (Cran crangon)	gon 70 - 80 mg/l, 48 hours
		Green or European shore crab (Caro maenas)	inus 70 - 80 mg/l, 48 hours
Fish	LC50	Starry, european flounder (Platichthy flesus)	s 100 - 330 mg/l, 48 hours
		Western mosquitofish (Gambusia aff	inis) 42 mg/l, 24 hours
			42 mg/l, 48 hours
			42 mg/l, 96 hours

^{*} Estimates for product may be based on additional component data not shown

Persistence and degradability

No data is available on the degradability of this product.

Bioaccumulative potential

No data available No data available

Mobility in soil Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Dispose of contents/container in accordance with local/regional/national/international regulations.

Material name: SULFURIC ACID 66 BE NSF 239225 Version #: 20 Revision date: 05-08-2017 Issue date: 06-05-2015 Local disposal regulations

Dispose in accordance with all applicable regulations.

Hazardous waste code

The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal

14. Transport information

DOT

UN number

UN1830

UN proper shipping name

SULFURIC ACID

Transport hazard class(es)

Class

8

Subsidiary risk

Packing group

Special precautions for user Read safety instructions, SDS and emergency procedures before handling

ERG number

DOT information on packaging may be different from that listed.

DOT



15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated

CERCLA Hazardous Substance List (40 CFR 302.4)

SULFURIC ACID (CAS 7664-93-9)

Listed

SARA 304 Emergency release notification

SULFURIC ACID (CAS 7664-93-9)

1000 LBS

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Chemical name

CAS number

Reportable Threshold

Threshold

Threshold

quantity

planning quantity

planning quantity, lower value

planning quantity, upper value

SULFURIC ACID

7664-93-9

1000

1000 lbs

SARA 311/312 Hazardous

chemical

Yes

SARA 313 (TRI reporting)

Chemical name CAS number % by wt. SULFURIC ACID 7664-93-9 93

Material name: SULFURIC ACID 66 BE NSF

SDS US

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Clean Water Act (CWA)

Hazardous substance

Section 112(r) (40 CFR

68.130)

Safe Drinking Water Act

Not regulated.

(SDWA)

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

SULFURIC ACID (CAS 7664-93-9)

6552

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

SULFURIC ACID (CAS 7664-93-9)

20 %WV

DEA Exempt Chemical Mixtures Code Number

SULFURIC ACID (CAS 7664-93-9)

6552

Food and Drug Administration (FDA) Total food additive Direct food additive GRAS food additive

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed

US. Massachusetts RTK - Substance List

SULFURIC ACID (CAS 7664-93-9)

US. New Jersey Worker and Community Right-to-Know Act

SULFURIC ACID (CAS 7664-93-9)

US. Pennsylvania Worker and Community Right-to-Know Law

SULFURIC ACID (CAS 7664-93-9)

US. Rhode Island RTK

SULFURIC ACID (CAS 7664-93-9)

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

. . . .

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

officed States & Fuerto Rico Toxic Substances Control Act (TSCA) inventory

16. Other information, including date of preparation or last revision

 Issue date
 06-05-2015

 Revision date
 05-08-2017

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^{*}A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

Version#

20

HMIS® ratings

Health: 3 Flammability: 0

Physical hazard: 0

NFPA ratings

Health: 3 Flammability: 0

Instability: 1

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Brenntag's terms and conditions of sale.